

## REMARKS

### 1. Support for Amendments

Support for amended claims 1, 8, 14, and 22 can be found on page 6, paragraphs [0020] – [0021]; page 7, paragraph [0023]; and Figures 3 and 4 of the published application and does not constitute new matter.

### 2. Claims rejections under 35 USC § 102

The Patent Office rejected independent claims 1, 8, 14, and 22 as being anticipated under 35 USC § 102(e) by Cayrefourcq et al. (U.S. Patent 7,176,108). The Applicants respectfully traverse these rejections. Applicants reserve the rights to pursue the claims as originally filed, but have nonetheless amended claims 1, 8, 14, and 22 to expedite prosecution.

To establish anticipation under 35 U.S.C. § 102(e), a cited reference must teach each and every element of the claim at issue either expressly or inherently. In addition, according to MPEP 2131, “the elements must be arranged as required by the claim...In re Bond. 910 F.2d 831, 15, USPQ2d 1566 (Fed. Cir. 1990).”

With respect to claims 1, 8, 14, and 22 The Patent Office specifically pointed to Cayrefourcq, Figures 2 and 3 and column 7, lines 4-60 to support the rejection. Applicants have reviewed the cited section and submit that Cayrefourcq does not teach each and every element of claims 1, 8, 14, and 22 expressly or inherently. For example, Cayrefourcq fails to teach that “bonding between the flexible substrate and the single crystalline silicon substrate is induced by an ion implantation process through the flexible substrate to an interface of the flexible substrate and the single crystalline silicon substrate” as recited in claims 1, 8, 14, and 22. The specification of the present application discloses (see, for example, paragraph 23) that the ion implantation of the invention induces a mixing process at the interface to change the composition and chemical bonding state between the substrates and induces an enhanced bonding between the substrates, which is a benefit of implanting ions through the flexible substrate.

In fact, Cayrefourcq suggests that the bonding between the substrates is carried out after the ion is implemented in the source substrate and therefore is not induced by the ion implantation (see, for example, column 7 lines 14-17; column 8 lines 3-5, 26-29, and 52-54).

Since Cayrefourcq fails to teach carrying out an ion implantation process through the target substrate to the interface of the substrates as set forth in claims 1, 8, 14, and 22 and instead merely suggests carrying out the ion implantation through the source substrate (i.e. the silicon substrate), the structure produced by Cayrefourcq lacks of the enhanced bonding induced by the ion implantation between the substrates. Therefore, Applicants submit that Cayrefourcq fails to anticipate claims 1, 8, 14, and 22 and these claims are now in condition for allowance.

With respect to the remaining claims, Applicants respectfully submit that these claims depend from claims 1, 8, 14, and 22 and therefore are in condition for allowance for at least the reasons set forth above.

## **Conclusion**

Applicant respectfully contends that the instant application is in condition for allowance in view of the claim amendments and arguments presented above, and respectfully requests it be allowed. If the Examiner believes that a telephone or personal interview would expedite prosecution of the instant application, the Examiner is respectfully invited to call the undersigned attorney at (312) 913-2106.

The Examiner is invited to contact the undersigned attorney at (312) 913-2106 if there are any questions about this filing.

Respectfully submitted,  
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Dated: August 4, 2008

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